

CLAIMS

1. A method for use (i) on a data processing system, (ii) in a computer program or (iii) on a computer readable medium, for
5 determining an optimal imposition plan for printing and folding a product, the method comprising:
 - calculating a plurality of imposition plans from a given set of input data comprising product specification data of said product, printing press data of a printing press for printing
10 said product and folding machine data of a folding machine for folding said product;
 - selecting said optimal imposition plan from said plurality of imposition plans.
- 15 2. The method according to claim 1 wherein said plurality of imposition plans are all possible imposition plans for said given set of input data.
3. The method according to claim 1 further comprising:
20 -selecting said optimal imposition plan from said plurality of imposition plans by means of a selection criterion that is selected from the group consisting of minimum production cost of said product, minimum production time of said product and optimal use of available machinery and resources.
- 25 4. The method according to claim 2 further comprising:
 - selecting said optimal imposition plan from said plurality of imposition plans by means of a selection criterion that is selected from the group consisting of minimum production cost
30 of said product, minimum production time of said product and optimal use of available machinery and resources.
5. The method according to claim 1 further comprising:

- 24 -

-representing each imposition plan of said plurality of imposition plans as a folding formula indicating a folding order of said product and suitable for setting up a folding machine.

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6. The method according to claim 1 further comprising:

-determining a sheet size for a web printing substrate for printing said product;

10 -using said sheet size in determining said plurality of imposition plans.

7. A method for calculating (i) on a data processing system, (ii) in a computer program or (iii) on a computer readable medium, a cost of a printed product, the method comprising:

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-calculating a plurality of imposition plans from a given set of input data comprising product specification data of said product, printing press data of a printing press for printing said product and folding machine data of a folding machine for folding said product;

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-selecting an optimal imposition plan from said plurality of imposition plans;
-calculating said cost of said product, based on said optimal imposition plan.

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8. The method according to claim 10 wherein said plurality of imposition plans are all possible imposition plans for said given set of input data.

30 9. The method according to claim 10 further comprising:

-representing each imposition plan of said plurality of imposition plans as a folding formula indicating a folding order of said product and suitable for setting up a folding

- 25 -

machine.

10. A method for determining (i) on a data processing system, (ii)
5 in a computer program or (iii) on a computer readable medium, an
optimal routing for manufacturing a printed product, the method
comprising:
- selecting a printing device from a first group of printing
10 devices for printing said product, the first group comprising
at least one device;
 - selecting a folding device from a second group of folding
devices for folding said product, the second group comprising
at least one device; wherein the first and the second group
together comprise at least three devices;
 - 15 -calculating a plurality of imposition plans from a given set of
input data including product specification data of said
product, printing press data of said selected printing device
and folding machine data of said selected folding device;
 - determining, from said plurality of imposition plans, a
20 specific optimal imposition plan for said product;
 - repeating said determination of said specific optimal
imposition plan for all combinations of printing devices of
said first group and folding devices of said second group, thus
obtaining a plurality of specific optimal imposition plans for
25 said product;
 - determining an optimal imposition plan from said plurality of
specific optimal imposition plans for said product, thus
obtaining said optimal routing for said product, said optimal
routing comprising (i) an optimal printing device out of said
30 first group of printing devices and associated with said
optimal imposition plan and (ii) an optimal folding device out
of said second group of folding devices and associated with

- 26 -

said optimal imposition plan.

11. The method according to claim 16 wherein said plurality of
imposition plans are all possible imposition plans for said
5 given set of input data.
12. The method according to claim 16 further comprising:
-determining said specific optimal imposition plan from said
plurality of imposition plans by means of a selection criterion
10 that is selected from the group consisting of minimum
production cost of said product, minimum production time of
said product and optimal use of available machinery and
resources.
13. The method according to claim 16 further comprising:
-representing each imposition plan of said plurality of
imposition plans as a folding formula indicating a folding
order of said product and suitable for setting up a folding
machine.
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14. A folding formula for representing an imposition plan for
printing and folding a product, wherein said folding formula
indicates a folding order of said product, is suitable for
setting up a folding machine and is machine-independent of said
25 folding machine.